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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LAM, THANH

ART UNIT PAPER NUMBER

2834

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/579,997

Applicant(s)
Smith et al.

Examiner
Thanh Lam

Art Unit
2834



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 16, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 21-23 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on May 26, 2000 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

1. Applicant's arguments with respect to claims 1-16 and 21-23 and Appeal brief filed on 10/16/2002 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, " the plurality of stator sections are fluidicly coupleable to allow a fluid flow therethrough" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2,6-15,17-21, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ekstromer.

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Regarding claim 1, Ekstromer discloses an electric motor, comprising: a plurality of stator sections (17), each stator section including an outer housing (22), wherein the plurality of stator sections are mechanically and electrically coupleable to form a stator of a desired length; and a rotor (24), disposed within the plurality of stator sections.

Regarding claim 2, Ekstromer discloses the plurality of stator sections includes: a first stator section, having a plurality of conductors extending longitudinally therethrough; a second stator section, electrically coupleable to an electrical power source and to the first stator section; and a third stator section, electrically coupleable to the first stator section; wherein electricity flowing through the plurality of stator sections produces a magnetic field that imparts rotative motion to the rotor.

Regarding claim 3, Ekstromer discloses at least some of the plurality of stator sections are fluidicly coupleable to allow a fluid flow therethrough.

Regarding claim 4, Ekstromer discloses the first stator section and the second stator section are fluidly coupleable to allow fluid to pass between the first and the second stator sections.

Regarding claim 5, Ekstromer discloses the second stator section is fluidly coupleable to an external device.

Regarding claim 6, Ekstromer discloses a plurality of seals disposed between stator sections.

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Regarding claim 7, Ekstromer discloses at least one stator section includes a plurality of conductors terminating at a plurality of corresponding protrusions.

Regarding claim 8, Ekstromer discloses at least one stator section includes a plurality of conductive elements configured for engagement with the plurality of corresponding protrusions when the stator sections are mechanically coupled.

Regarding claim 9, Ekstromer discloses each conductive element includes a hollow receptacle sized to received a corresponding protrusion.

Regarding claim 10, Ekstromer discloses at least one stator section is coupled to an adjacent stator section by a separate coupling device.

Regarding claim 11, Ekstromer discloses the coupling device is configured to mechanically and electrically couple the at least one stator section to the adjacent stator section. 5

Regarding claim 12, Ekstromer discloses each coupling device includes a plurality of receptacles to receive a corresponding plurality of protruding conductors.

Regarding claim 13, Ekstromer discloses each stator section outer housing includes at least one of a threaded collar and a threaded end.

Regarding claim 14, Ekstromer discloses a submersible pumping system, comprising: a submersible electric motor, including: a plurality of modular motor sections, each motor section includes a stator section (17) and a housing section(22), wherein the modular motor sections are mechanically and electrically coupleable to form a motor of a desired length; a rotor (24)

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disposed within the plurality of modular motor sections; and a submersible pump (12), drivingly coupled to the rotor of the submersible electric motor.

Regarding claim 15, Ekstromer discloses the plurality of modular motor sections includes: a first stator section, having a plurality of conductors extending longitudinally therethrough; a second stator section, electrically coupleable to a source of electrical power and to the first stator section; and a third stator section, electrically coupleable to the first stator section; wherein electricity flowing through the plurality of stator sections produces a magnetic field that imparts rotative motion to the rotor.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3-5, 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ekstromer in view of Bogdanov et al.

Ekstromer disclose every aspect of the claimed invention except at least some of the plurality of stator sections are fluidicly coupleable to allow a fluid flow therethrough.

Bogdanov et al. disclose at least some of the plurality of stator sections are fluidicly coupleable to allow a fluid flow therethrough for the purpose of the fluid flow is for cooling the stator sections.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stator sections of Ekstromer to accommodate the stator sections to allow the fluid flows therethrough as taught by Bogdanov et al. in order to improve the cooling of the stator sections.

Regarding claim 4, the proposal in combination of Ekstromer and Bogdanov et al. disclose the first stator section and the second stator section are fluidly coupleable to allow fluid to pass between the first and the second stator sections.

Regarding claim 5, the proposal in combination of Ekstromer and Bogdanov et al. disclose the second stator section is fluidly coupleable to an external device.

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Regarding claim 16, the proposal in combination of Ekstromer and Bogdanov et al. disclose a motor protector, wherein the first, second and third stator sections are fluidly coupleable so as to allow fluid to pass between the first stator section and the motor Protector.

Regarding claim 22, the proposal in combination of Ekstromer and Bogdanov et al. disclose each of the plurality of stator sections is fluidly coupleable to an adjacent stator section.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.



Thanh Lam

Patent Examiner